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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,767	06/20/2001	Ancil S. Taylor JR.	B6181	4002

378 7590 09/26/2002

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EXAMINER

CECIL, TERRY K

ART UNIT	PAPER NUMBER
1723	✓

DATE MAILED: 09/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

TC-4

Office Action Summary	Application No.	Applicant(s)
	09/885,767	TAYLOR, ANCIL S.
	Examiner	Art Unit
	Mr. Terry K. Cecil	1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 23 August 2001 .

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) 5-11 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-4 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are objected to by the Examiner.

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) Notice of References Cited (PTO-892)

16) Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .

18) Interview Summary (PTO-413) Paper No(s) _____.

19) Notice of Informal Patent Application (PTO-152)

20) Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-4, drawn to a slurry processing system, classified in class 210, subclass 167.
 - II. Claims 5-11, drawn to methods to treating sludge, classified in class 406, subclass 106.
2. The inventions are distinct, each from the other because of the following reason:
 - Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus of Invention I can be used in a different process—e.g. a process that does not require the sludge to be a result of dredging as in Invention II.
3. Restriction for examination purposes is proper because of the reasons given above and also because (i) they have acquired a separate status in the art as shown by their different classification, (ii) the search required for the respective groups is not necessarily required by each of the other groups, and (iii) their subject matter is recognized as divergent.
4. During a telephone conversation with Dennis Griggs on 9-19-2002, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-4. Affirmation of this

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election must be made by applicant in replying to this Office action. Claims 5-11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

5. Claim 3 is objected to because of the following informalities: in line 16, "pump" has been misspelled.

Appropriate correction is required.

Claim Rejections - 35 USC ' 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are rejected because of the following terms lack antecedent basis:

- in claim 2, "the booster pump output" (line 12);
- in claim 3, "the inlet" (line 8); "the output" (lines 13 and 18); "the inlet slurry pump" (lines 13-14); "the input" (line 14); "the outlet" (line 15); and "the inlet make-up water pump" of line 18 (did applicant intend to claim "the inlet make-up *booster* pump" as in claim 6?); and
- in claim 4, "the buoyant slurry pipeline" of line 14 (did applicant intend to claim "the buoyant *return* pipeline" as in line 5?); and "the dredge hopper" (line 19).

Claim Rejections - 35 USC ' 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Sloan et al.(U.S. 4,854,058), hereinafter "Sloan". Sloan discloses a slurry processing system comprising the following:

- a slurry processing unit (DH1 and associated pumps);
- a treatment facility (100 and the elements therein);
- a slurry delivery pipe (line 116 delivers slurry to 100); and
- a make-up water return pipeline (103 returns the aqueous phase of the slurry to the DH1 unit after it has been filtered in filter tank 104) [as in claim 1].

Claim Rejections - 35 USC ' 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Determining the scope and contents of the prior art.

Ascertaining the differences between the prior art and the claims at issue.

Resolving the level of ordinary skill in the pertinent art.

Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor, Jr. (U.S. 5,269,635), hereinafter "Taylor" in view of the Japanese Reference 62-225629, hereinafter '629. Taylor discloses a slurry processing system comprising the following:

- a slurry processing unit (the elements aboard barge 12, see figure 1) coupled to a slurry treatment facility 16 via a slurry delivery line 14 [as in claims 1, 3 and 4];
- a treatment facility that is onshore [as in claims 3 and 4];
- a slurry processing unit that includes a sludge hopper 22, a make-up water pump 30, a slurry inlet pump 26, a slurry discharge pump 32, discharge inlet piping 28 (slurry piping), and make-up water piping that includes injection pipes (e.g. 66, 68 and 90) [as in claims 2 and 3] connected to an intermediate point of the slurry piping [as in claim 3]; discharge piping 40 connected between the discharge pump and the slurry delivery line 14 [as in claim 3];
- the following limitations of claim 4 including a discharge pump 32, inlet slurry pump 26, and slurry piping therebetween; discharge piping 40 connected between the discharge pump and the slurry pipeline, wherein the slurry pipeline is buoyant; and a make-up water line including a plurality of injection stations for specific gravity adjustment (via control signals 92, 94, 96) [as in claim 4].

Taylor does not disclose a make-up water return line connected between the treatment facility and the slurry processing unit for returning the water separated from the slurry to the processing unit. '629 teaches such a water make-up return line 12 [as in claims 1, 3 and 4] that returns water separated from the "treatment facility" 1 to a box (analogous to the hopper of Taylor) of the slurry processing unit. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the make-up water return line of '629 connected between the make-up water pump 30 and the onshore treatment facility 16 of Taylor and to include a line to introduce make-up directly into the box (hopper 22) of Taylor, since '629 teaches benefits of (i) using recycled water for transporting the slurry between stations; (ii) combining with solids in the box to remove residue therefrom; and (iii) preventing pollution of the water around the processing unit by not dumping the separated water from the treatment facility directly into the body of water. It would also be obvious to the skilled man to recycle the water in order to prevent toxic slurry contaminants that may remain in the separated water from contaminating the land area around the treatment facility—in order to comply with laws established by the EPA (such laws are explained by the applicant on page 3).

Taylor teaches a buoyant slurry delivery line; upon modification with '629, it would have been obvious for the make-up line to be buoyant as well, since both lines are connected between the same processing unit and treatment facility. Also upon modification, the make-up pump 30 of Taylor would be considered a booster pump (and need only be a low pressure type, as in claim 4) since the line 12 of '629 includes a pump 11 at the treatment facility for delivering make-up water.

12. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (703)305-0079 for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:00a to 4:30p, on at least four days during the week M-F.
- The group receptionist can be reached at (703)308-0661 for inquiries of a general nature or those relating to the status of this or proceeding applications.
- Wanda Walker, the examiner's supervisor, can be reached at (703)308-0457 if attempts to reach the examiner are unsuccessful.
- Fax numbers for this art unit are as follows:
 - i. (703)872-9310 for *official* faxes (i.e. faxes to be entered as part of the file history) that are not after-final; and
 - ii. (703)872-9311 if after-final.

Examiner Terry K. Cecil
A.U. 1723

TKC *TKC*
September 23, 2002